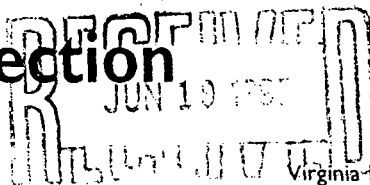


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Department of Environmental Protection

NORTHEAST DISTRICT



Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
DEP - JACKSONVILLE Secretary

June 16, 1995

CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Mr. John D. Baker, President
Florida Rock Industries, Inc.
155 East 21st Street
Jacksonville, Florida 34601

Dear Mr. Baker:

RE: Newberry Cement Plant
Permits Nos. AC01-267311 and PSD-FL-228

The Department has reviewed your May 16, 1995, letter of response, to our letter dated April 14, 1995. Based on this technical review, the application is still incomplete. Please submit to the Department's Bureau of Air Regulation the following information, including all assumptions, reference material, and calculations.

1. TOXIC ANALYSIS

The response to question No. 2 of the emission data section, concerning hazardous air pollutant (HAP) emissions, noted that Table 11.6-9 of AP-42 was the source for the HAP emission rates supplied in the response. Although information about the HAP emission rates and resulting ambient concentrations were supplied for beryllium, lead, HCl and benzene, other HAPS identified within AP-42 with available emission factors for cement kilns were not listed in the response. Please provide the emission rates and ambient maximum 8-hour, 24-hour and annual concentrations for all HAPs that will be emitted by this facility as calculated from AP-42. In addition, if any HAP measurements have been made at your facility or other cement kilns operating under conditions similar to the proposed facility from which you can readily obtain this data, please submit that information as well.

Mr. John D. Baker
Florida Rock Industries
Page Two

2. BACT ANALYSIS

Please explore more the option of Low NOx Burner as BACT for this project. It appears the cost figure of \$1050 per ton removed is within the limits of recent BACT determinations done by the Department.

3. AIR QUALITY

Please address the Air Quality Related Values (AQRV) Analysis and regional haze comments in the attached National Park Service correspondence.

We will resume processing the application after the requested information is received. If you have any questions on this matter, please write to me or call Marty Costello, P.E. (BACT Engineer), John Glunn (Air Toxic Specialist), Cleve Holladay (Meteorologist) or Teresa Heron (Review Engineer) at (904) 488-1344.

Sincerely,



A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/th/t

cc: Robert Leetch, P.E., NED
John Koogler, P.E.
Jewell Harper, EPA
John Bunyak, NPS
Pat Reynolds, NED Branch
Emerson Raulerson, NED



IN REPLY REFER TO:

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard
Atlanta, Georgia 30345

JUN 09 1995

Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

Dear Mr. Fancy:

We have reviewed the Prevention of Significant Deterioration Application for the new cement plant proposed by Florida Rock Industries, Incorporated. Enclosed are the technical review comments from our Air Quality Branch.

Thank you for giving us the opportunity to comment on this permit application. We appreciate your cooperation in notifying us of proposed projects with the potential to impact the air quality and related resources of our Class I air quality areas. If you have questions, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at telephone number 303/969-2617.

Sincerely yours,

Noreen K. Clough
Regional Director

Enclosure

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Technical Review of Prevention of Significant Deterioration Permit Application for Florida Rock Industries, Inc.'s Proposed Cement Plant, Alachua County, Florida

by

Air Quality Branch, Fish and Wildlife Service - Denver

Florida Rock Industries, Incorporated (FRI), is proposing to build a new Portland cement plant at their existing quarry in Alachua County, Newberry, Florida. The new plant would be located 95 km north of Chassahowitzka Wilderness Area (WA) and 105 km south of Okefenokee WA, Class I air quality areas administered by the U.S. Fish and Wildlife Service (FWS). The new plant would emit significant amounts of particulate matter, PM-10, sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), carbon monoxide, beryllium (Be), and hydrogen chloride (HCl).

Air Quality Modeling Analysis

The applicant used the EPA MESOPUFF II model to assess the impacts to Chassahowitzka and Okefenokee WAs from SO₂, NO_x, and PM-10. The modeling was performed for only one year (1986); our office was not consulted on this protocol. The applicant has subsequently stated that because of the effort required to run MESOPUFF II, the applicant felt that 1 year was acceptable rather than the 5 years recommended in the EPA document Interagency Workgroup on Air Quality Modeling (TWAOM) Phase I Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility (EPA-454/R-93-015, April 1993). For this one year, the applicant's impact was below the FWS Class I significant levels. In addition, this modeled impact is most likely conservative because the applicant did not employ the chemistry option in the model. Therefore, we will accept this analysis as indicating that impacts during the other four years are probably below the FWS Class I significant levels.

However, please note that future sources that contribute significantly to Class I increment consumption should consult with our office on modeling protocol. These sources may be required to model multiple years.

Best Available Control Technology (BACT)

Our office submitted comments regarding the BACT analysis on April 17. The BACT analysis now appears to be complete.

Air Quality Related Values (AQRV) Analysis

The applicant notes that no adverse impacts to AQRVs are expected as a result of this project because the source is 100 km from either Class I area and predicted concentrations of PM-10, SO₂, and NO_x at the Class I areas are less than the FWS significant impact levels.

These reasons are insufficient to predict no adverse impact to Class I AQRVs. First, distance from the Class I area is not to be used as a criterion for determining whether adverse impacts may occur. Such impacts may occur from sources beyond 100 km. Second, FWS significant impact levels are to be used only to assess a source's contribution to Class I increment consumption. The FWS significant impact levels are not to be used to assess impacts to AQRVs. In addition, we are concerned not only with an individual source's impacts to AQRVs, but cumulative impacts to AQRVs, i.e., the total pollutant concentration that the AQRVs will experience. An AQRV analysis should consider all pollutant sources in the area that may affect the Class I area. We ask that future PSD applicants consult with our office regarding the need for a cumulative AQRV analysis.

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The applicant did not perform a regional haze analysis for either Class I area. The procedures for the regional haze analysis are found in Appendix B of the TWAQM document. The applicant should contact our office for updates on these procedures. A measured background visual range of 65 km should be used. In addition, the analysis should use the 24-hour concentrations of SO₂ and PM-10 stack emissions at the respective Class I areas.

If you have any questions, please call Ellen Porter of our Air Quality Branch, at (303) 969-2617.